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These species elections are made with the understanding that they are required for examination purposes only and that all species will be considered should the generic claim be found to be allowable. 37 C.F.R. 1.141(a).

These elections read at least on claims 1-3, 5, 9-16 and 18-20.

## Remarks

In response to the Restriction Requirement, Applicants have elected Group II and various species elections. Applicants make these elections with traverse because both criteria for proper restriction as set forth under MPEP 803.01 are not present. Accordingly, the restriction is improper.

MPEP 803.01 sets forth that two criteria must exist for a proper restriction requirement between patentably distinct inventions. These are:

- a) the inventions must be independent and distinct, and
- b) there must be a serious burden on the Examiner to search and examine the inventions together. Applicants submit that there is no serious burden on the Examiner to search and examine the inventions together for the reasons set forth below.

The Examiner states that "the inventions are different with respect to ingredients, method steps, and endpoints which require non-coextensive searches". Applicants disagree. The pending claims commonly relate to the differentiation of a specific hematopoietic progenitor population into various non-hematopoietic lineages. The inventions of Groups I-VI all use the same starting population of hematopoietic progenitors cells and a similar culture system. In addition, differentiation into neuronal, mesenchymal and parenchymal cells can all be accomplished by culturing the hematopoietic progenitor cells in the presence of bFGF, and differentiation of genetically altered progenitors does not require different culture conditions. Accordingly, ingredients and method steps are the same, at the very least, for Groups I, II and V.

MPEP 808.02 states that related yet distinct inventions can be subject to restriction only upon the showing of one of the following: a) a separate classification for each invention; b) a separate status in the art; or c) a different field of search. The Examiner has already classified Groups I-V together in the <u>same</u> class and subclass. The Examiner has asserted that the Groups correspond to "recognized" divergent subject matter, however he has <u>not</u> provided any evidence of a separate status in the art, as required by MPEP 808.02. Finally, it is expected that art pertinent to the various Groups will be found in a given search for any one Group. To address

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this last point, Applicants performed a simple and brief medline search for "hematopoietic stem cell" AND "non-hematopoietic". In one such search, Applicants identified references relating to differentiation of hematopoietic progenitor cells generally into non-hematopoietic lineages and specifically into endothelial cells, skin cells, smooth muscle cells and mesenchymal cells such as osteocytes, chondrocytes, adipocytes and skeletal muscle, as well as references relating to genetically altered hematopoietic progenitor cells. Thus, the searches necessary to assess patentability are not "non-coextensive" as indicated by the Examiner, and there is no clear indication that a different field of search is necessary in order to identify art pertinent to all Groups.

In summary, Applicants maintain that search and examination of claim 1 is co-extensive with the search of claims dependent thereon, including those currently divided into Groups I-VI. "If search and examination of an entire application can be made without serious burden, the examiner <u>must</u> examine it on the merits, even though it includes claims to independent or distinct inventions." MPEP 803.01. Search and examination of claim 1 and claims dependent thereon can be made without serious burden for the afore-mentioned reasons.

Applicants respectfully request reconsideration of the Restriction between Groups I-VI, more specifically between Groups I-V, and even more specifically between Groups I, II and V.

Applicants expressly reserve the right to file one or more divisional applications on the subject matter of the non-elected claims.

## **Summary**

If the Examiner has any questions and believes that a telephone conference with Applicants' attorney would prove helpful in expediting the prosecution of this application, he is urged to call the undersigned at (617) 646-8266.

Respectfully submitted, *Pykett et al.*, *Applicants* 

Maria A. Trevisan, Reg. No. 48,207

Wolf, Greenfield & Sacks, P.C.

600 Atlantic Avenue

Boston, Massachusetts 02210-2211

Telephone: (617) 646-8000

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